

Systematic Review of Interventions for Sleep Problems in People Living with HIV

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Problem: Poor sleep is common problem in people living with human immunodeficiency virus (HIV). It has been estimated that 58-75% of HIV-infected people world-wide report poor sleep quality after diagnosis. Contributing factors of poor sleep include older age, higher CD-4 counts, medication use, and comorbid conditions. It is unclear what types of sleep interventions have been tested as possible treatments for poor sleep in this population.

Purpose: To conduct a systematic review of existing literature to exam the literature pertaining to interventions for poor sleep in individuals living with HIV.

Strategy: The systematic review selected articles that were; peer-reviewed, original articles from 1980 through September 2015, using PubMed or PsycInfo, with preset inclusion and exclusion criteria. Information from articles were abstracted by one reviewer with a second reviewer verifying all abstracted information. Summative evaluation of all articles used standardized decision rules and are presented in table format.

Results: A total of 463 titles and abstracts were reviewed with 5 articles selected for review. Three studies used pilot designs and 2 were randomized-control trials. Three studies were cognitive or behavioral treatments for sleep problems (sleep hygiene, sleep promotion, caffeine reduction) and 2 studies used lower limb splinting to reduce pain and improve sleep. Sample sizes ranged from 22-92 subjects that included both male and female subjects, focused on HIV only (n=3), used self-reported sleep measures and actigraphy (n=2). Three of the four studies found significant improvements in some aspect of sleep.

Discussion: Intervention-based studies for sleep problems in people living with HIV are minimal. None of the reviewed interventions showed strong support to recommend the specific intervention for practice. The studies included only portions of a traditional

cognitive-behavioral intervention, small sample sizes with only mild-moderate effects or changes in self-reported sleep.